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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,787	05/24/2001	Bruce A. Milligan	10995.00036	2887

7590 05/04/2004

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EXAMINER

LE, MARK T

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/864,787

Applicant(s)

MILLIGAN ET AL.

Examiner

Mark T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-7,9-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-7, 9-12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This communication is responsive to the amendment papers, filed on March 18, 2004. The claims and Applicant's remarks in the amendment papers have been carefully considered.
2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US 1,806,075).

Martin, Figs. 1-4, shows traction pin 18 similar to that recited in the instant claim, including mounting plate 17, cylindrical end with tapered region 20, and a frustum shaped region located below mounting plate 17. However, the pin body of Martin is a hollow structure provided with reinforcement instead of a non-hollow structure as claimed.

Note that non-hollow or solid for strength and hollow for lightweight are a well known concept to an artisan (Official Notice is taken). Accordingly, it would have been obvious to one skilled in the art to alternatively make the pin body of Martin as a non-hollow structure to increase strength.

3. Claims 1, 3, 5-7, 9-12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior art Fig. 5 of the instant drawings in view of Martin (US 1,806,075).

Prior art Fig. 5 shows a traction pin/traction pin assembly similar to that recited in the instant claims, except that the traction pin of the Prior art Fig. 5 is formed of multiple elements instead of a one-piece cast body.

Martin discloses traction pin 16 formed of a one-piece cast body.

In view of Martin, it would have been obvious to one skilled in the art to form the traction pin of the Prior art Fig. 5 as a one-piece cast body, in a manner similar to that taught by Martin, so as to achieve the expected advantages thereof.

Regarding the claimed pin body being a non-hollow structure, note that the options of making a structure in a solid, non-hollow formation for higher strength or a hollow formation for reducing weight, material and cost are routinely faced by engineers or mechanical designers; and as result, such options have become well known alternatives with known advantages, and it is only required a level of common sense to select a desirable alternative for an application so as to achieve the expected effect thereof. Accordingly, it would have been obvious to one skilled in the art to make the cylindrical part of the pin body of Martin as a solid, non-hollow cylinder so as to achieve the expected increasing strength thereof.

4. Claims 1, 3, 5-7, 9-12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior art Fig. 5 of the instant drawings.

Prior art Fig. 5 shows a traction pin/traction pin assembly similar to that recited in the instant claims, except that the traction pin of the Prior art Fig. 5 is formed of multiple elements instead of a one-piece cast body. However, note that "it involves no invention to cast in one piece an article which has formerly been cast in two pieces and put together" - Howard v. Detroit Stove Works, 150 U.S. 164 (1893). Similarly, it would have been obvious to one skilled in the art to cast the traction pin of the Prior art Fig. 5 as a one-piece cast body as the obviousness of such concept (integrally cast or separately cast) has been well settled.

Regarding the claimed pin body being a non-hollow structure, note that the options of making a structure in a solid, non-hollow formation for higher strength or a hollow formation for reducing weight, material and cost are routinely faced by engineers or mechanical designers; and as result, such options have become well known alternatives with known advantages, and it is only required a level of common sense to select a desirable alternative for an application so as to achieve the expected effect thereof. Accordingly, it would have been obvious to one skilled in the art to make the cylindrical part of the pin body of the Prior art Figure 5 as a solid, non-hollow cylinder so as to achieve the expected increasing strength thereof.

5. Responses to Applicant's Remarks:

Regarding Applicant's argument to the non-hollow feature of the present invention, note that the above ground of rejection has fully addressed this feature, which is directed to merely the choice between a hollow construction and a solid construction, which are very common alternatives to one skilled in the art. As to the nature of the need for one alternative over the other, as in Applicant's argument, it does not make one alternative non-obvious over the other because one skilled in the art is still able to make the choice on the basis of the well known advantages associated with the respective alternatives. In conclusion, Applicant's arguments are not persuasive, and the previous grounds of rejection are again applied as above.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

7. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark T. Le whose telephone number is 703-308-3663. The examiner can normally be reached on Mon-Fri (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark T. Le  
Primary Examiner  
Art Unit 3617

mle  
5/1/04